Amendments of the Claims

The following listing of claims, if entered, will replace all prior versions, and listings, of claims in the above-identified patent application.

Listing of Claims:

 (previously presented) A method for controlling an unmanned vehicle ("UV") with a state machine on said UV, said method comprising:

entering a state of said state machine;
receiving an input on said UV;

evaluating a condition of a rule corresponding to said state using said input;

performing at least one action corresponding to said rule based on a result of said evaluating; and reconfiguring said state machine as a new state machine.

- (previously presented) The method of claim 1 wherein said reconfiguring is responsive to said performing at least one action.
- ${\rm 3.\ (previously\ presented)}\qquad {\rm The\ method\ of\ claim\ 1}$ wherein said reconfiguring alters a transition of said state machine.
- 4. (previously presented) The method of claim 1 wherein said reconfiguring alters a rule of a state of said state machine.
- 5. (original) The method of claim 4 wherein said altering said rule comprises altering a condition of said rule.

- (original) The method of claim 1 wherein said performing at least one action comprises altering navigation of said UV.
- 7. (original) The method of claim 6 wherein said altering navigation comprises rotating a servo of said UV.
- 8. (original) The method of claim 1 wherein said receiving of said input comprises receiving data from a sensor mounted on said UV.
- 9. (original) The method of claim 8 wherein said sensor is configured to measure the status of onboard equipment on said UV.
- 10. (original) The method of claim 8 wherein said data comprise data indicative of a position of said UV.
- 11. (original) The method of claim 1 wherein said receiving of said input comprises receiving data from a camera mounted on said UV.
- 12. (original) The method of claim 11 further comprising transmitting said data from said camera to a ground station.
- 13. (original) The method of claim 1 wherein said performing at least one action comprises setting a second input.

- 14. (original) The method of claim 13 further comprising evaluating a condition of a second rule using said second input.
- 15. (previously presented) A method for managing a first participant in a network of unmanned vehicles and ground stations, wherein said network includes at least one other participant, said method comprising:

maintaining first state information about said first participant;

transmitting an update of said first state
information to said at least one other participant;
maintaining second state information about said
at least one other participant; and

receiving an update of said second state information from said at least one other participant.

 $\mbox{ 16. (previously presented)} \qquad \mbox{The method of claim 15} \\ \mbox{wherein:} \\$

said first state information includes information received from a first sensor mounted on said first participant; and

said second state information includes information received from a second sensor mounted on said at least one other participant.

17. (previously presented) The method of claim 15 wherein:

said first state information includes information about a first mission status of said first participant; and

said second state information includes information about a second mission status of said at least one other participant.

- 18. (original) The method of claim 15 further comprising sending a command to one of said at least one other participant.
- 19. (original) The method of claim 18 wherein said command affects navigation of said one of said at least one other participant.
- 20. (original) The method of claim 15 wherein said transmitting said update comprises:

determining a probability that said update will experience interference from one of said at least one other participant in a channel;

comparing a quantity based on said probability to a threshold; and

transmitting in said channel when said quantity is less than said threshold.

- 21. (original) The method of claim 20 wherein said threshold is based on a message indicative of whether said one of said at least one other participant will transmit during said channel.
- 22. (previously presented) The method of claim 20 wherein said determining said probability comprises determining an urgency of a message from said one of said at least one other participant.

23-32. (cancelled)

33. (previously presented) A method of communicating between a first sender and a recipient, said method comprising:

determining a probability that a second communication from a second sender will interfere with a first communication from said first sender to said recipient in a channel:

comparing a quantity derived from said probability to a threshold; and

communicating between said first sender and said recipient in said channel based on a comparison of said derived quantity to said threshold.

- 34. (original) The method of claim 33 wherein said determining said probability comprises determining a position of said second sender.
- 35. (original) The method of claim 33 wherein said determining said probability comprises determining whether said second sender intends to communicate in said channel.
- 36. (original) The method of claim 33 wherein said determining said probability comprises determining a message urgency of said second sender.
- 37. (original) The method of claim 33 further comprising:

determining that said communicating from said first sender to said recipient is of a relatively high urgency; and

using a channel assigned to said first sender to perform said communicating.

 $\mbox{38. (previously presented)} \qquad \mbox{The method of claim 33} \label{eq:38}$ wherein:

said channel is assigned to one sender belonging to a group of senders that comprises said first and second senders; and

said determining a probability comprises determining whether said channel is assigned to said second sender.

39. (previously presented) The method of claim 38 wherein:

said probability is set to a first value when said channel is assigned to said second sender; and

said probability is set to a second value when said channel is not assigned to said second sender.

- $40.\ (\mbox{original})$ The method of claim 33 wherein said channel comprises a time slice.
- 41. (original) The method of claim 33 wherein said channel comprises a frequency.
- 42. (original) The method of claim 33 wherein said channel comprises a set of frequencies whose selection is based on a correlation code.
 - 43. (original) The method of claim 33 wherein: said channel comprises a time slice;

 $\mbox{ said communicating occurs at at least one } \\ \mbox{frequency; and} \\$

said at least one frequency is selected based on a correlation code.

44. (previously presented) A system for controlling an unmanned vehicle ("UV") with a state machine on said UV, said system comprising:

means for entering a state of said state

machine;

means for receiving an input on said UV;
 means for evaluating a condition of a rule
corresponding to said state using said input;

means for performing at least one action corresponding to said rule based on a result of said evaluating; and

means for reconfiguring said state machine as a new state machine.

45. (previously presented) A system for managing a first participant in a network of unmanned vehicles and ground stations, wherein said network includes at least one other participant, said method comprising:

means for maintaining first state information
about said first participant;

 $\label{eq:means} \mbox{means for transmitting an update of said first} \\ \mbox{state information to said at least one other participant;}$

means for maintaining second state information about said at least one other participant; and

means for receiving an update of said second state information from said at least one other participant.